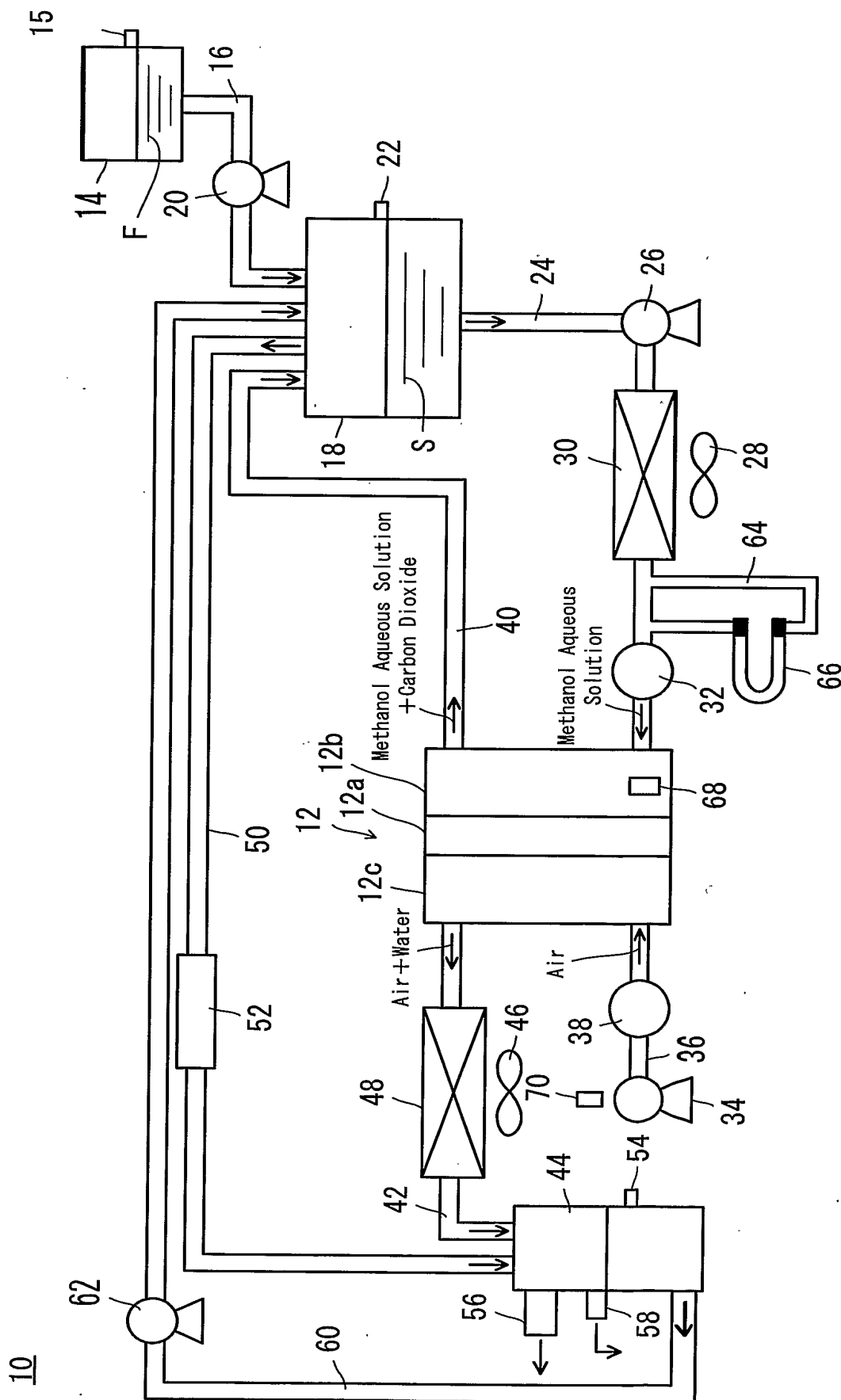


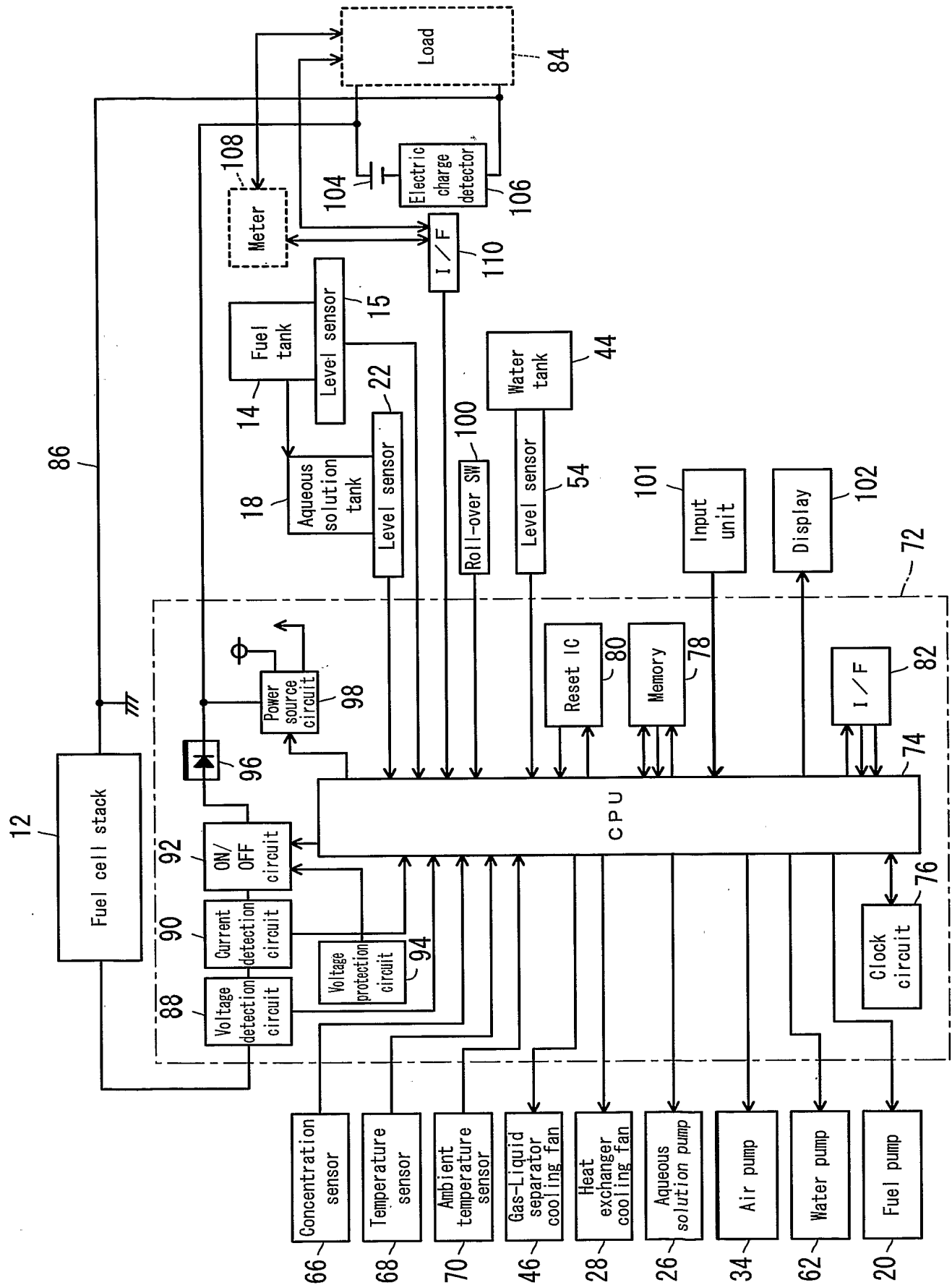
1/17

FIG. 1



2/17

FIG. 2



3/17

F I G. 3

Cell stack temperature	$5^{\circ}\text{C} >$	$5^{\circ}\text{C} \leq$ $15^{\circ}\text{C} >$	$15^{\circ}\text{C} \leq$ $25^{\circ}\text{C} >$	$25^{\circ}\text{C} \leq$
Target concentration	10wt%	8wt%	6wt%	5wt%

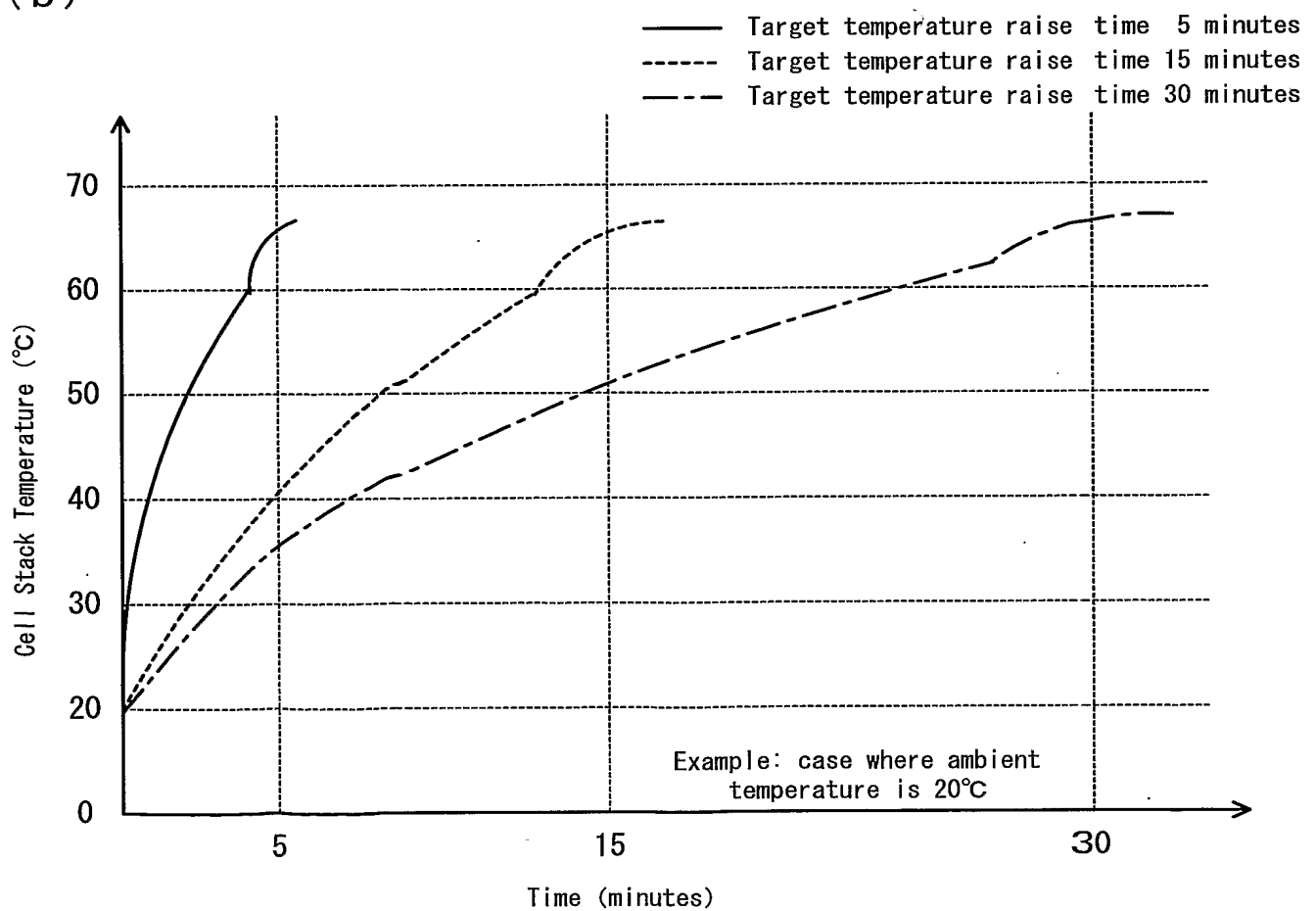
4/17

FIG. 4

(a)

Cell stack Target temperature raise time	5°C>	5°C≤ 15°C>	15°C≤ 25°C>	25°C≤
5 minutes	16wt%	14wt%	10wt%	6wt%
15 minutes	10wt%	8wt%	6wt%	4wt%
30 minutes	8wt%	6wt%	5wt%	4wt%

(b)



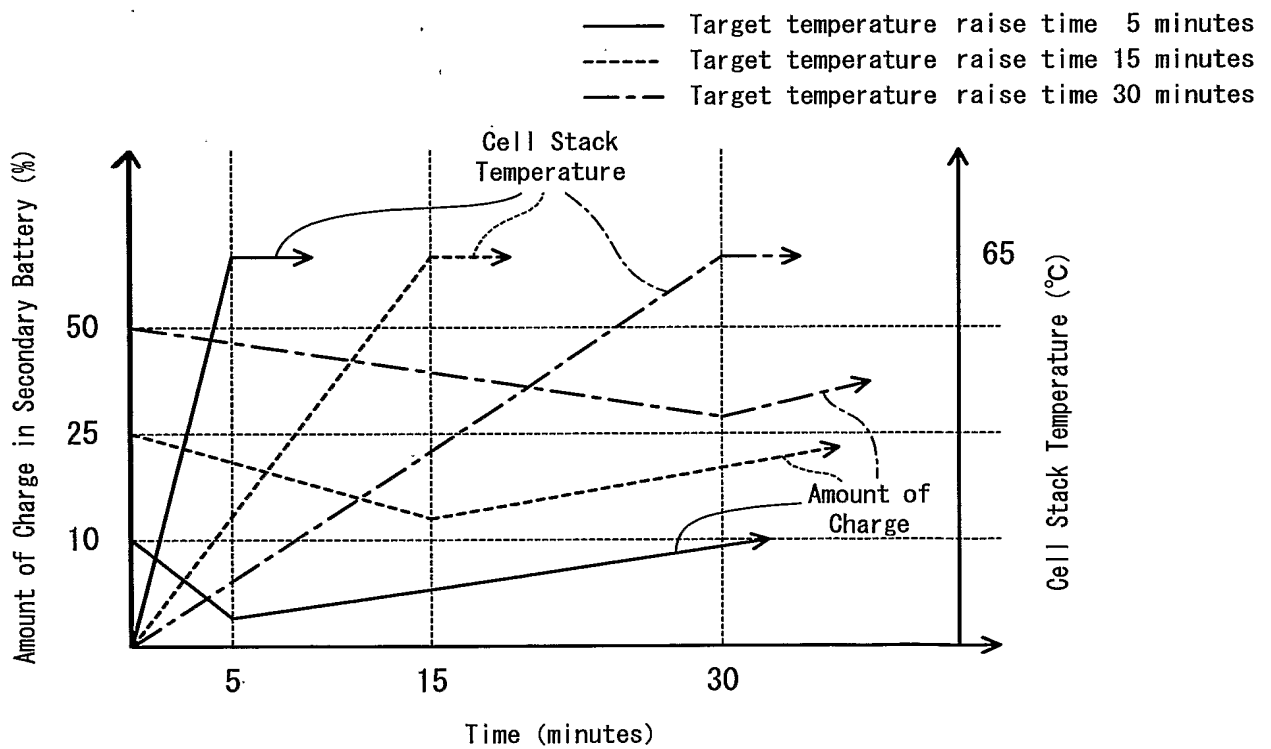
5/17

FIG. 5

(a)

Amount of Charge in Secondary Battery	$10\% \leq$ $25\% >$	$25\% \leq$ $50\% >$	$50\% \leq$
Target temperature raise time	5 minutes	15 minutes	30 minutes

(b)



(c)

Amount of Charge in Secondary Battery \ Cell stack temperature	$5^{\circ}\text{C} >$	$5^{\circ}\text{C} \leq$ $15^{\circ}\text{C} >$	$15^{\circ}\text{C} \leq$ $25^{\circ}\text{C} >$	$25^{\circ}\text{C} \leq$
$10\% \leq$ $25\% >$	16wt%	14wt%	10wt%	6wt%
$25\% \leq$ $50\% >$	10wt%	8wt%	6wt%	4wt%
$50\% \leq$	8wt%	6wt%	5wt%	4wt%

6/17

FIG. 6

(a)

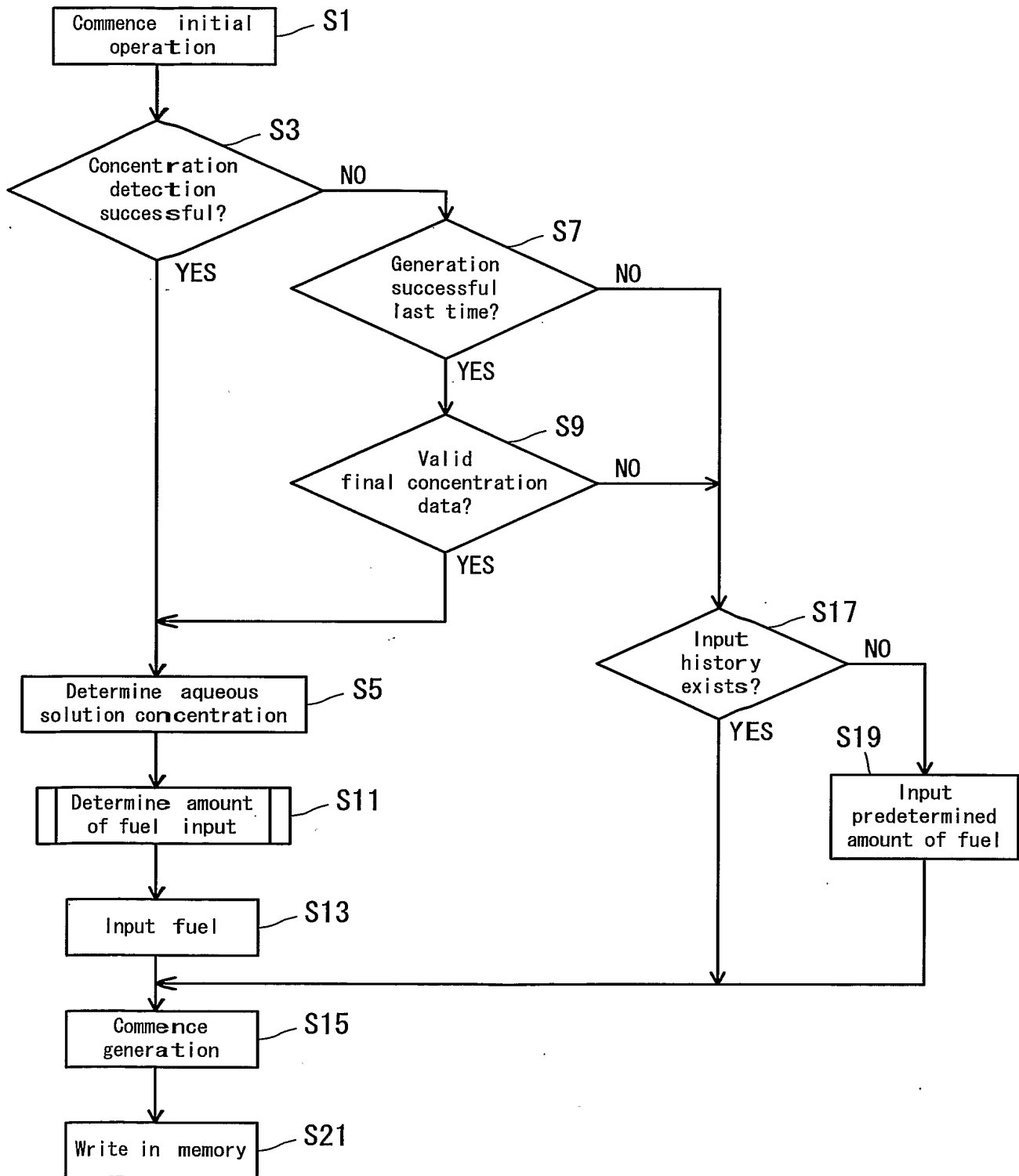
Temperature Difference between Cell stack and Ambient Temperature	$0^{\circ}\text{C} \leq$ $10^{\circ}\text{C} >$	$10^{\circ}\text{C} \leq$ $20^{\circ}\text{C} >$	$20^{\circ}\text{C} \leq$ $30^{\circ}\text{C} >$	$30^{\circ}\text{C} \leq$
Amount of Correction	10cc	15cc	20cc	25cc

(b)

Amount of Charge in Secondary Battery	$0\% \leq$ $10\% >$	$10\% \leq$ $25\% >$	$25\% \leq$ $50\% >$	$50\% \leq$
Target Concentration	Do not start system	16wt%	10wt%	8wt%

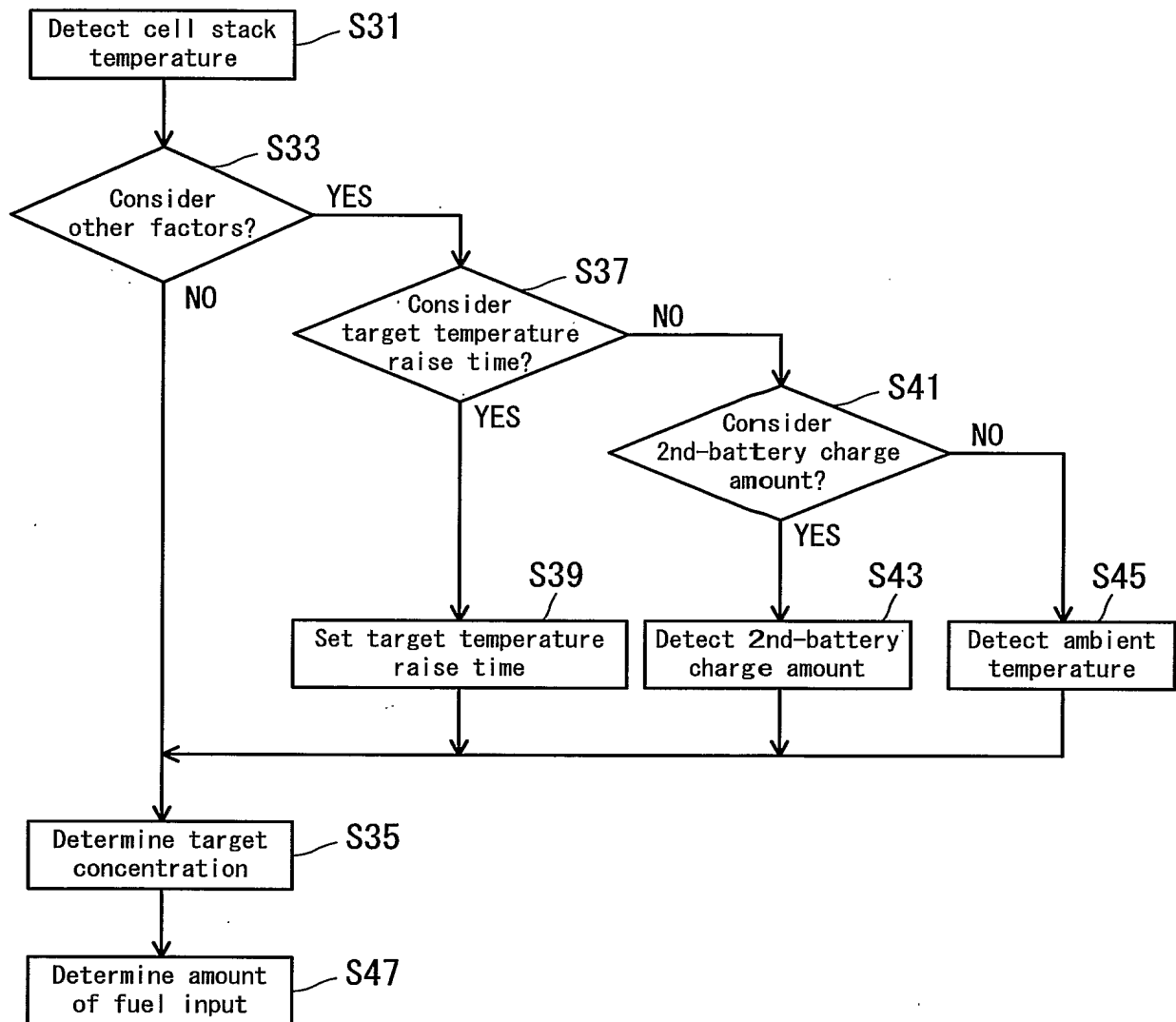
7/17

FIG. 7



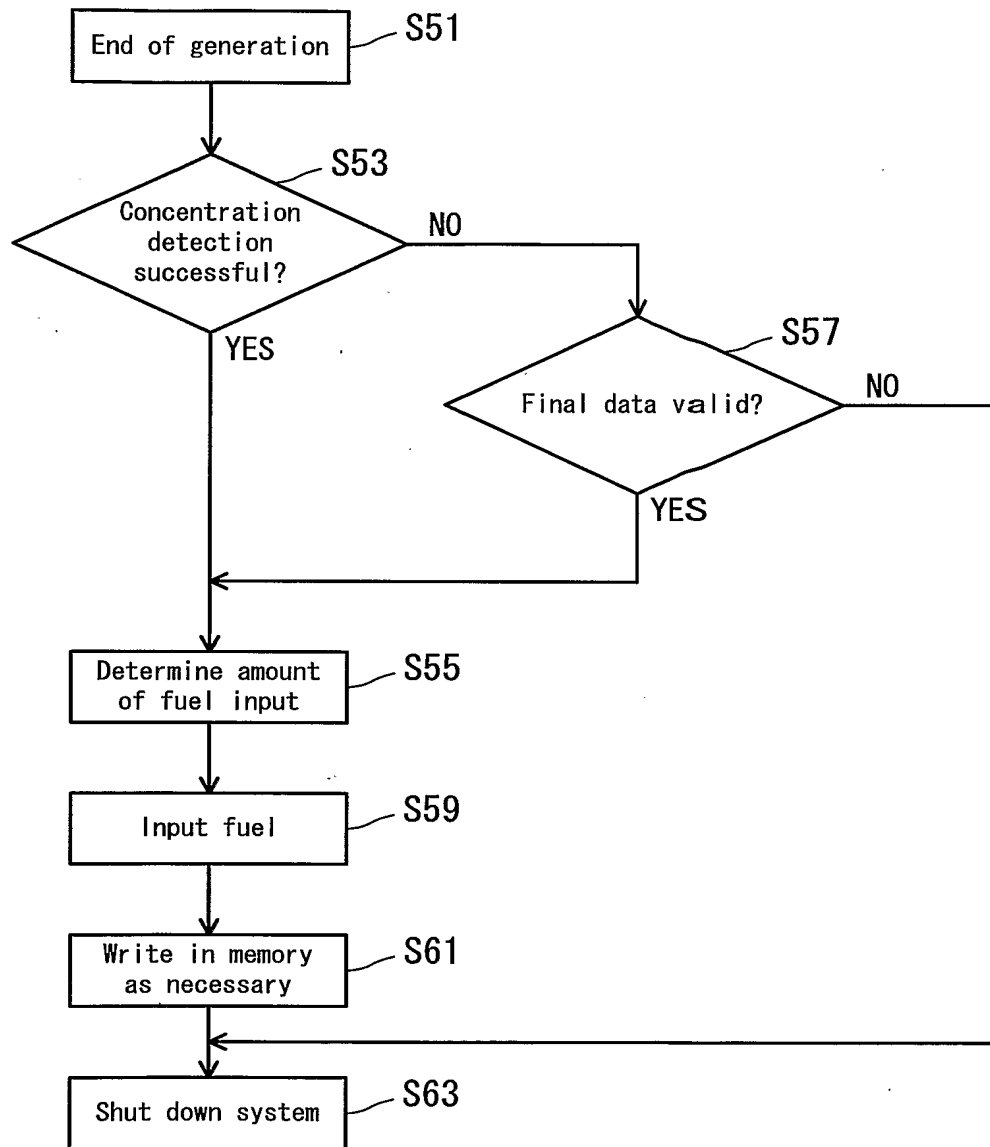
8/17

FIG. 8

Input Amount Determination Subroutine

9/17

FIG. 9



10/17

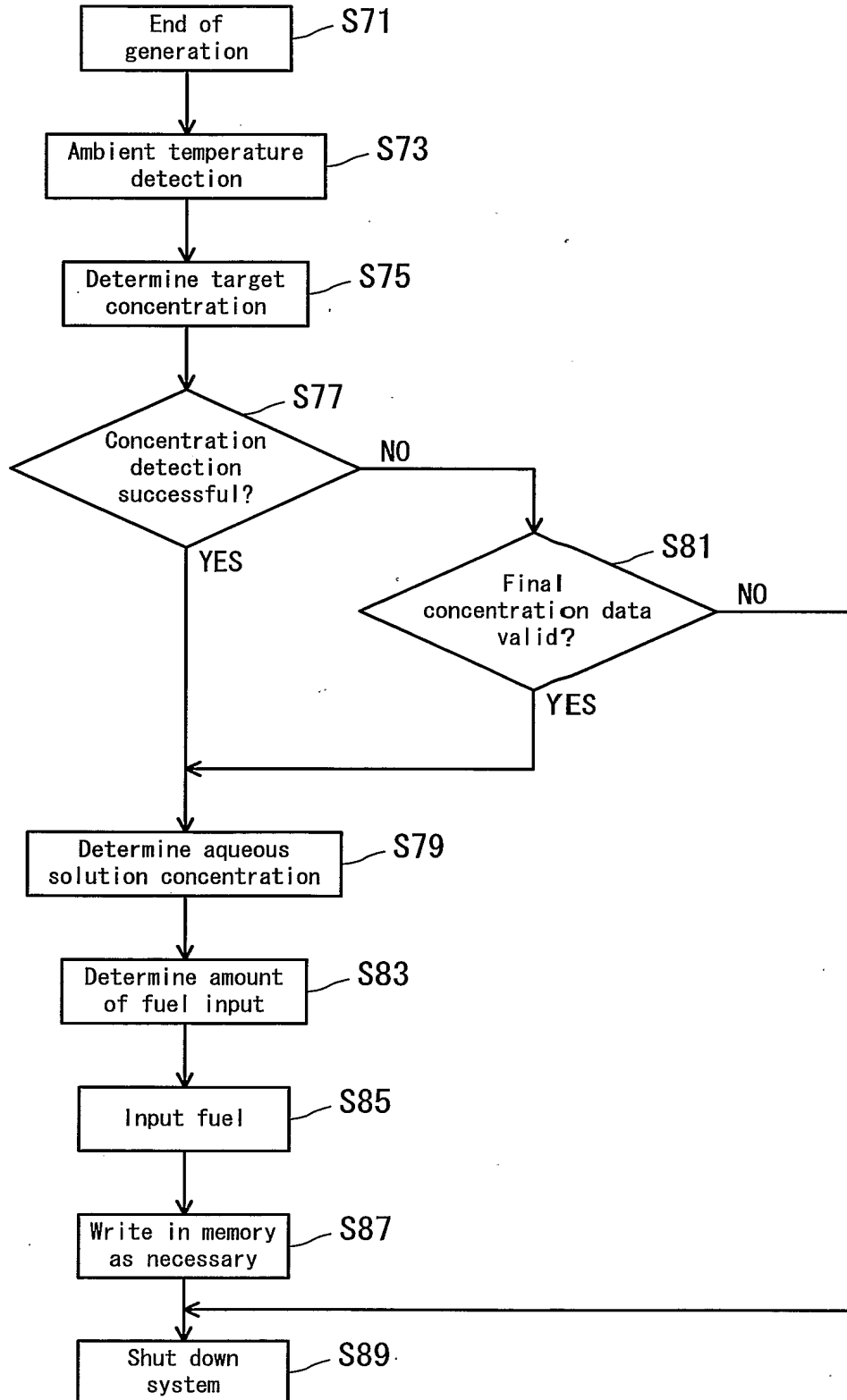
FIG. 10

Target Concentration: 6wt%

Concentration of Methanol Aqueous Solution at the end of generation	0wt% \leq 2wt% $>$	2wt% \leq 4wt% $>$	4wt% \leq 6wt% $>$	6wt% \leq
Amount of Methanol Fuel Input	200cc	160cc	120cc	100cc

11/17

FIG. 11









12/17

FIG. 12

Ambient Temperature	$0^{\circ}\text{C} \leq$ $10^{\circ}\text{C} >$	$10^{\circ}\text{C} \leq$ $20^{\circ}\text{C} >$	$20^{\circ}\text{C} \leq$ $30^{\circ}\text{C} >$	$30^{\circ}\text{C} \leq$ $40^{\circ}\text{C} >$	$40^{\circ}\text{C} \leq$
Target Concentration	8wt%	7wt%	6wt%	5wt%	4wt%

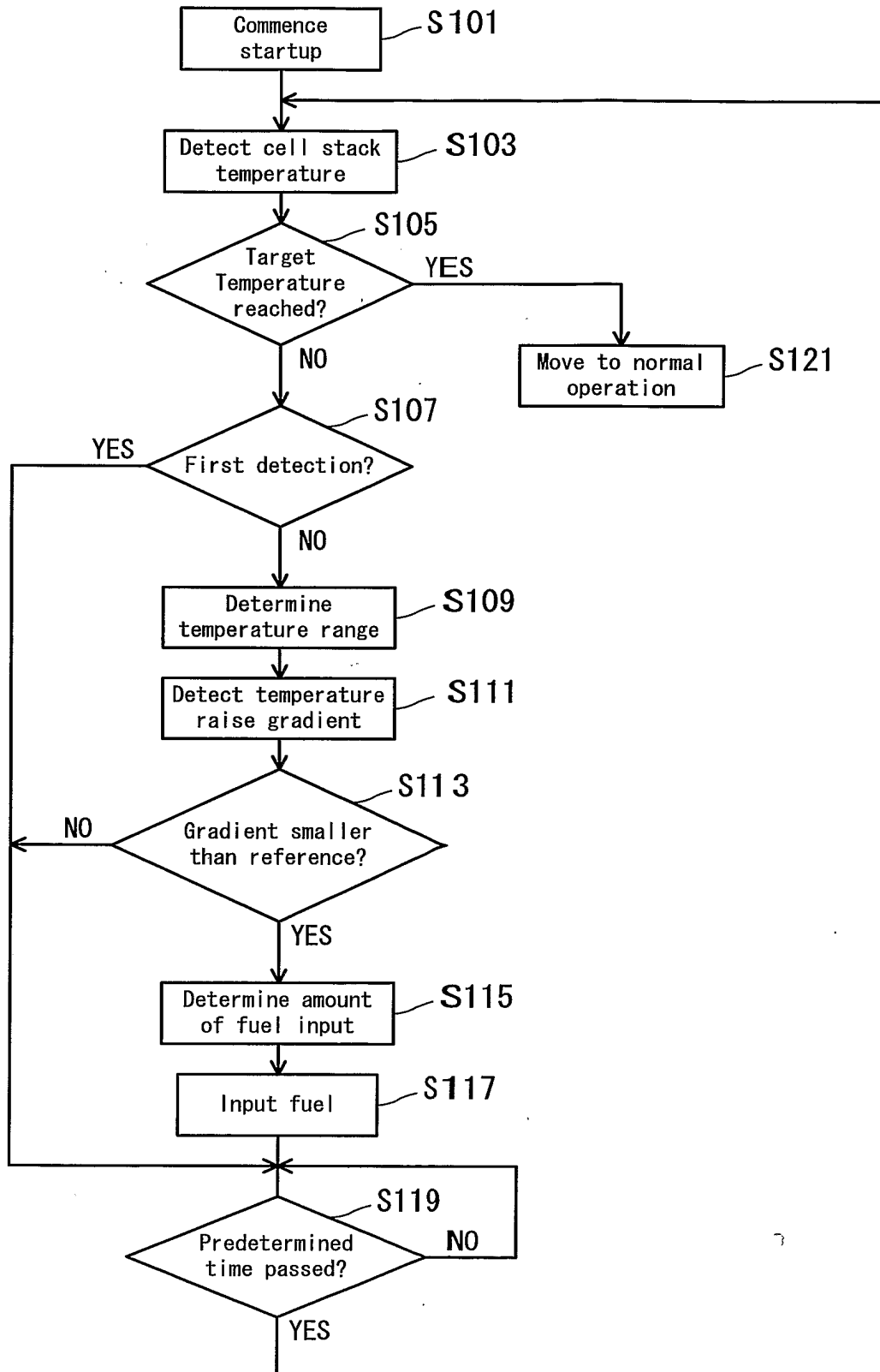
13/17

FIG. 13

Temperature Range (°C)	Temperature Raise Reference Gradient (°C/min)	Amount of Fuel Input (cc)
60 - 65	 0.5	3
50 - 60	 1.0	4
40 - 50	 1.5	6
30 - 40	 2.0	8
20 - 30	 2.5	10
0 - 20	 3.0	12

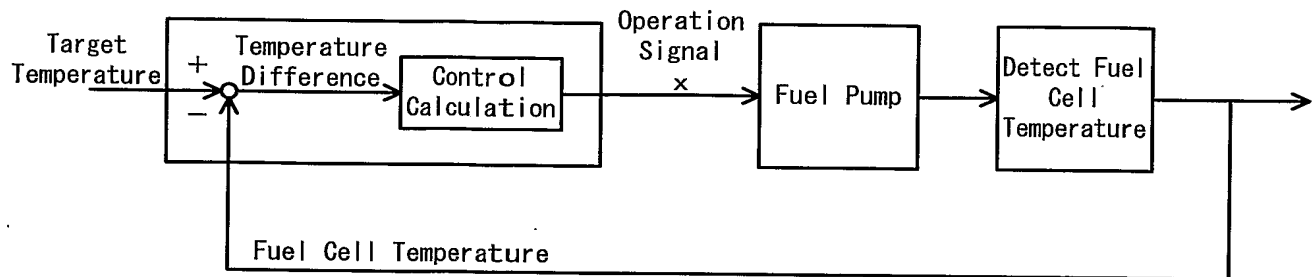
14/17

FIG. 14



15/17

FIG. 15



16/17

FIG. 16

